

ABSTRACT

A *Solanum bulbocastanum* gene has been cloned from a late blight-resistance locus and its sequence provided, together with the sequence of the encoded protein. DNA encoding the resistance protein has been introduced into potato plants and confers resistance to *Phytophthora infestans*, the causal agent of late blight. The resistance protein is in the class of Nucleotide Binding Site-Leucine-Rich Repeat Proteins (NBS-LRRP), and the gene in *S. bulbocastanum* is flanked by related NBS-LRRP gene sequences.